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# The Influence of International Service-Learning on Cultural Competence in Baccalaureate Nursing Graduates and Their Subsequent Nursing Practice

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THE INFLUENCE OF INTERNATIONAL SERVICE-LEARNING ON  
CULTURAL COMPETENCE IN BACCALAUREATE NURSING  
GRADUATES AND THEIR SUBSEQUENT NURSING PRACTICE

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A Dissertation  
Presented to  
the Graduate School of  
Clemson University

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy  
Curriculum and Instruction

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by  
Roxanne M. Amerson  
December 2009

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Accepted by:  
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Cheryl Warner

## **ABSTRACT**

A series of research studies was completed over 3 years to evaluate baccalaureate nursing students' transcultural self-efficacy following the completion of service-learning projects. A quantitative pilot study was completed in 2007 with a convenience sample of students (n=60) enrolled in a community health nursing course. Several clinical groups worked with local communities and one clinical group took part in a one-week program in Guatemala. The Transcultural Self-Efficacy Tool (TSET) was administered at the beginning and completion of the semester. A paired-samples *t* test demonstrated a significant increase for pre-test to post-test total and subscale scores.

A follow-up field study was completed in 2008 using a sequential explanatory mixed method design. The quantitative component followed the same format as the pilot study conducted in 2007. Pre-test and post-test surveys (n=45) again revealed a significant increase in total and subscale scores. The qualitative component of the research project utilized a case study approach with two clinical groups (n=16). Each student maintained reflection notes which were completed prior to, during, and at the conclusion of the experience. One clinical group completed a service-learning project in a local, African American community, while the other group participated in a one-week international service-learning experience in Ecuador. Themes were categorized based on the learning dimensions of cultural competence. The with-in case analysis of the local group revealed 4 themes, while the international group revealed 6 themes. The cross-case analysis of the 2 clinical groups revealed similar themes, yet the students who

participated in the Ecuador trip were able to provide more explicit details of culturally relevant knowledge and experiences.

In 2009, an explanatory case study was used to explain how participation in an international service-learning project influenced transcultural self-efficacy of baccalaureate nursing graduates following graduation and their subsequent clinical practice. Telephone interviews were conducted with 14 nursing graduates, who had participated in international experiences. Comparative analysis revealed increased self-efficacy in cognitive, practical, and affective learning dimensions. As a result of the increased transcultural self-efficacy, graduates were able to provide culturally congruent care. Findings suggest that international service-learning is an effective teaching strategy for cultural competence.

## **DEDICATION**

This document is dedicated to my father who encouraged me to always pursue an education. While he never had the opportunity to complete his own education, he understood the value of academic knowledge and recognized the doors that would be opened by a college education. He always stressed that I could complete anything that I set my mind to accomplish. It has been a long road with many curves and detours. He is no longer with us, but I know he will be with me in spirit as I receive my degree. I want to thank him for giving me the inspiration to believe in myself and the will to accomplish any goal.

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Dr. Marianne Jeffreys served as a mentor and content expert on transcultural nursing issues. I want to thank her for prompt responses to my questions and for giving me the opportunity to expand the body of research on the learning dimensions of cultural competence.

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My husband, Jay, has always supported me through all my educational endeavors. It has taken 29 years as I have taken the “scenic route” through nursing from licensed practical nurse to a PhD. I thank him for always believing in me and encouraging me during stressful times. To my children, Keith, Cagney, and Jerry, I love you. I hope you now can understand why Mom was always doing homework.

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## PREFACE

*The Essentials of Baccalaureate Education for Professional Nursing Practice* (American Association of Colleges of Nursing, 1998) played a major role in promoting an emphasis on service-learning (Levy & Lehna, 2002) in nursing education. The professional values of baccalaureate education include a sense of social justice to assure equal treatment and access to care for all people. The core competencies call for students to engage in clinical experiences which require self reflection along with core knowledge for health promotion and disease prevention developed through community partnerships. Teaching methodologies are directed toward the use of active learning through service-learning activities or community-based experiences. While nursing education, especially in public health practicum experiences, has long used service-learning; this was the first professional nursing document to call for service-learning as a preferred teaching methodology.

In September 2008, the American Association of Colleges of Nursing released *Cultural Competence in Baccalaureate Nursing Education*. This document provided end-of-program competencies for baccalaureate nursing program graduates and provided suggestions for incorporating these competencies into an undergraduate curriculum. The rationale of this document proposes the integration of cultural competence in order to support “patient-centered care which identifies, respects and addresses differences in patient’s values, preferences, and expressed needs” (American Association of Colleges of Nursing, 2008, pg. 1). Further rationales address the presence of disparities in health and health care, the need for social justice, and the globalization of today’s society.

Five end-of-program competencies provide guidelines for nurse educators to facilitate the teaching of culturally competent care. These competencies include:

1. Apply knowledge of social and cultural factors that affect nursing and health care across multiple contexts.
2. Use relevant data sources and best evidence in providing culturally competent care.
3. Promote achievement of safe and quality outcomes of care for diverse populations.
4. Advocate for social justice, including commitment to the health of vulnerable populations and the elimination of health disparities.
5. Participates in continuous cultural competence development.

This dissertation demonstrates one researcher's attempt to incorporate these competencies through service-learning in community health nursing.

## **CHAPTER ONE**

### **INTRODUCTION**

A young, Latino female comes to the public health clinic complaining of symptoms suggestive of a sexually transmitted disease. A pelvic examination is required to confirm a diagnosis. Unfortunately, the client does not speak English and a translator is required to assist with the communication during the physical examination. The only translator available to the clinic this day is a male. The student nurse assigned to assist as a chaperone to the physician does not recognize the ethical dilemma that exists from a cultural viewpoint. How does this situation create a cultural imposition? What should the student nurse do? How does this influence the delivery of health care? Will this affect the response of the client to a health care plan? These are just a few of the questions that illustrate the need for understanding and implementation of culturally congruent care. Culturally congruent care is culturally based care which fits with the client's values, beliefs, and lifeways for health and well-being, or to prevent illness, disability, or death (Leininger & McFarland, 2006). Nurses are exposed to situations everyday during clinical practice, which have the potential to create cultural impositions. Nurse educators must adapt curriculums to incorporate cultural values, beliefs, and practices which will positively promote health promotion and help-seeking behaviors for diverse populations in today's society.

The challenge for nurse educators is to determine the efficacy of specific pedagogies utilized for teaching cultural competence. Schools of nursing have utilized a variety of methods to educate students about diverse cultures. Service-learning is one

specific pedagogy which can provide opportunities to incorporate the cultural competencies of baccalaureate education into a curriculum (American Association of Colleges of Nursing, 1998); thereby promoting transcultural self-efficacy. The National League for Nursing (NLN) *A Vision for Nursing Education Report* (1993) and the Pew Health Professions Commission (1998) both have advocated service-learning as a component of community health nursing. The NLN *A Vision for Nursing Education Report* advocated for a shift in nursing education to a community-based and community-focused health care system which incorporated health promotion and prevention strategies for individuals and communities. The Pew Health Professions Commission identified service-learning as a key competency for students (Riner & Becklenberg, 2001) and called for an increased focus on public service, especially in the community (Kulewicz, 2001).

The National and Community Service Act of 1990 defined service-learning as “thoughtfully organized service..... integrated into the student’s academic curriculum and provides structured time for students to think, talk, and write” (Harkavy & Donovan, 2000, p. 14). Service-learning in communities can provide one avenue for introducing nursing students to different perspectives through encounters with diverse populations. Research has demonstrated that participation in service-learning increases knowledge of different races and cultures (Astin & Sax, 1998) and has an effect of reducing stereotypes (Eyler, Giles, Stenson, & Gray, 2001). The 2004 National Sample Survey of Registered Nurses (American Nurses Association, 2008) reported that 81.8% of nurses identified their racial/ethnic category as White, non-Hispanic, while approximately one in three

residents of the United States is a minority with Hispanics noted as the largest minority group (“Minority Population,” 2007). It is these demographic findings which demand that nursing students be educated about the cultural values, beliefs, and practices of non-dominant cultures in order to provide culturally congruent care. This provision of culturally congruent care will promote a decrease in health disparities for racial and ethnic minority groups, socioeconomically disadvantaged groups, and rural populations (American Association of Colleges of Nursing, 2008).

Many schools of nursing incorporate service-learning into community health courses (Beauchesne & Meservey 1999; Childs, Sepples, & Moody, 2003; Ciaccio & Walker, 1998; Dillon & Sternas, 1997; Evenson, Gierach, Dreke, & Dangel, 2005; Hurst & Osban, 2000), but few have formally evaluated the effectiveness. One study evaluated students who took part in an international service-learning experience to Ecuador (Bentley & Ellison, 2007). Scores on the *Inventory for Assessing the Process for Cultural Competence Among Healthcare Professionals – Revised 2005* (Campinha-Bacote, 2003) before and after course instruction, and following the trip were analyzed. All students increased their competency score with the greatest number moving to the culturally competent level following the trip. Two pilot studies evaluated the effects of service-learning on the critical thinking skills, cultural competency, and civic engagement in RN-to-BSN students (Nokes, Nickitas, Keida, & Neville, 2005). Pre- and post-intervention scores indicated slightly lower critical thinking and cultural competence scores and significantly higher civic engagement scores.

Limited research exists for the effectiveness of teaching cultural competence. Alpers and Zoucha (1996) evaluated students' cultural competence self-efficacy following cultural diversity theory. Caffrey, Neander, Markle, and Stewart (2005) evaluated the test scores of students following cultural diversity instruction and a 5-week immersion program in Guatemala. Four studies by Jeffreys (2000) utilizing the Transcultural Self-Efficacy Tool (TSET) with associate degree nursing students found students to be least confident in knowledge, more confident in interviewing, and most confident in their attitudes. An integrative review of 15 studies related to the perceived cultural self-efficacy of nurses stressed the need to continue evaluation of cultural self-efficacy in nursing students (Coffman, Shellman, & Bernal, 2004). Nurse educators need to continue to evaluate the efficacy of specific teaching methodologies which promote cultural competence in nursing students.

Service-learning, as a distinct pedagogy, has been utilized by this researcher to influence the learning dimensions of cultural competence and the subsequent research to evaluate students' transcultural self-efficacy following community and international practicum experiences (Amerson, in press). The direction of this research follows the recommendations of cultural competence experts (Calvillo, Clark, Ballantyne, Pacquiao, Purnell, & Villarruel, 2009; Jeffreys, 2000; Jeffreys, 2006), which suggest that programs should be evaluating the effectiveness of specific pedagogies, assessing changes in self-efficacy perceptions, and evaluating outcomes which influence nursing practice and health care delivery.

Over a three year period, several studies were completed to evaluate the transcultural self-efficacy of baccalaureate nursing students enrolled in a community health course. Two research questions guided these studies:

1. How does participation in a service-learning project in a different culture influence the learning dimensions of cultural competence among baccalaureate nursing students?
2. How does participation in an international service-learning project during a community health course influence transcultural self-efficacy of baccalaureate nursing students following graduation and their subsequent clinical practice?

The first question was addressed through the 2007 quantitative study and the 2008 mixed method study. The second question was addressed through the 2009 qualitative study as part of a final dissertation. The initial quantitative, pilot study completed in 2007 utilized a convenience sample of 60 students following the completion of service-learning projects with local and international communities (Amerson, in press). Students worked in clinical groups to complete community assessments, develop educational programs based on community needs, and implement an educational program with their assigned community. The majority of students conducted their programs with local communities with a special focus on vulnerable populations. One clinical group took part in a one-week international service-learning program in Guatemala. The TSET was administered at the beginning and completion of the semester. Pre- and post-test surveys were analyzed for statistical significance based on total and subscale scores. A paired-samples *t* test demonstrated a significant increase in both total and subscale scores for all clinical groups. Multivariate analysis attempted to evaluate the effect of clinical section on pre-

and post-test scores. A significant effect was found for the cognitive scores, yet follow-up analysis of variance demonstrated no significant effect. No significant effect was found with practical, affective, or total scores.

In an effort to replicate the findings of the 2007 pilot, a follow-up field study was completed in 2008 using a sequential explanatory mixed method design. The quantitative component followed the same research design as the pilot study conducted in 2007. A qualitative component was added to the study in order to simultaneously generalize findings from a sample to a population, while gaining a deeper understanding of the phenomenon being studied (Hanson, Clark, Petska, Creswell, & Creswell, 2005). A total of 45 pre-test and post-test surveys were analyzed based on total scores and subscale scores for each clinical section. Again, a paired-samples *t* test demonstrated a significant increase from pre-test to post-test for both total scores and subscale scores. While multivariate analysis attempted to evaluate the effect of clinical section on pre- and post-test scores, no significant effect was found with either subscale or total scores. The qualitative component of the research project utilized a collective case study approach with two clinical groups. As a requirement of the service-learning, each student maintained reflection notes which were completed prior to, during, and at the conclusion of the experience. Students were provided with a semi-structured outline for questions to guide their reflection notes. These questions were based on Borton's Developmental Model for Reflective Practice (1970). The two groups provided a total of 16 participants. One clinical group completed a service-learning project in a local, African American community, while the other group participated in a one-week international service-



learning experience in Ecuador. Within-case and cross-case analyses were conducted with student reflection notes to identify relevant themes. Themes were categorized based on the 3 learning dimensions of cultural competence as noted by Jeffreys (2006): cognitive, practical, and affective. The with-in case analysis of the local group revealed 4 themes: 1 cognitive dimension, 1 practical dimension, and 2 affective dimensions. The international group revealed 6 themes: 1 cognitive, 2 practical, and 3 affective dimensions. These results are consistent with Jeffreys' work (2000) that students are most confident in the affective dimension of transcultural self-efficacy. The cross-case analysis of the 2 clinical groups revealed similar themes, yet the students who participated in the Ecuador trip were able to provide more explicit details of culturally relevant knowledge and experiences.

The studies completed in 2007 and 2008 indicated that service-learning experiences did positively influence transcultural self-efficacy in baccalaureate nursing students. Questions regarding the long-term effects of service-learning remained unanswered. It is these questions which directed the subsequent qualitative study in 2009 to evaluate the influence of international service-learning during a community health course on transcultural self-efficacy in baccalaureate nursing graduates and their subsequent nursing practice. A qualitative, explanatory case study approach was used to conduct telephone interviews with 14 nursing graduates, who had previously participated in international trips to Ecuador and Guatemala during the last 3 years. A constant comparative analysis revealed that graduates experienced increased self-efficacy in cognitive, practical, and affective learning dimensions. Graduates were able to provide

culturally congruent care as a result of the increased transcultural self-efficacy.

Additional themes supported the value of experiential learning during the international service-learning projects and the commitment to future international service. The findings suggest that international service-learning is an effective teaching strategy for teaching cultural competence. This research represents the first known study to use a qualitative method to assess the learning dimensions of cultural competence.

The following articles document the pedagogy utilized to influence the learning dimensions of cultural competence and the subsequent research which has taken place to evaluate students' transcultural self-efficacy following community and international service-learning. Both quantitative and qualitative research methodologies have demonstrated an increase in transcultural self-efficacy following service-learning projects in culturally diverse communities.

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## **CHAPTER TWO**

### **THE IMPACT OF SERVICE-LEARNING ON CULTURAL COMPETENCE**

Nursing has long been known as a discipline providing service to others. Community-based clinical experiences have required students to work in local communities to address health issues and apply population-based interventions. The problem exists that communities are changing, especially the ethnic demographics of communities that have predominantly been of European descent. Approximately one in three residents within the United States is a minority with Hispanics noted as the largest minority group (“Minority Population,” 2007). The rising number of minorities creates significant concerns about the abilities of nursing to provide culturally congruent care. Studies need to be conducted to link the efficacy of specific pedagogies to research-based practice for teaching cultural competence. Service-learning provides an excellent pedagogy for introducing students to clients of different cultural backgrounds, becoming aware of the issues these clients face related to culture and health care, and teaching culturally appropriate care.

#### **Theoretical Framework**

“Service-learning is a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service-learning” (Jacoby, 1996, p. 5). The hyphen that appears in service-learning is important to emphasize the relationship between service and learning. The community reflected in the definition may refer to the needs of local

neighborhoods, the state, the nation, or global regions. Service-learning has long been evident in nursing and social work curriculums as a pedagogy for teaching social awareness and addressing health disparities that exist within vulnerable populations.

The definition established by the federally, legislated National Service Act of 1993 stated that service-learning is a method for students to learn through active participation in service experiences. These experiences are designed to meet actual community needs; to integrate academic curriculum in order for the student to think, talk, or write about actual service activity; to provide students with opportunities to use newly acquired skills and knowledge in real-life situations in their own communities; and to enhance what is taught in school and help foster the development of a sense of caring for others (O'Grady, 2000).

According to the Process of Cultural Competence in the Delivery of Healthcare Services (Campinha-Bacote, 2002), cultural competence is an on-going process consisting of five cultural constructs: awareness, knowledge, skill, encounters, and desire. Awareness involves examining and recognizing one's own prejudice and biases. Knowledge relates to the common health beliefs, practices, and disease incidence and prevalence among ethnic groups. Skill is the collection of cultural data and the application of a culturally-based physical assessment. Encounters are the direct experiences encountered with people of different cultural backgrounds. Desire is the motivation to work with people of different cultures and is influenced by the first four constructs.



The Cultural Competence and Confidence Model (Jeffreys, 2006) explains the phenomenon of developing cultural competence through the construct of transcultural self-efficacy. Transcultural self-efficacy is the individual's self-perceived confidence level for applying concepts of transcultural nursing to diverse client populations. Cultural competence incorporates three dimensions (cognitive, practical, and affective) which influence confidence as the nurse strives to provide cultural congruent care. The cognitive dimension focuses on knowledge and understanding of cultural beliefs and practices. The practical dimension focuses on the ability to interview clients and conduct a cultural assessment. The affective dimension addresses attitudes, awareness, appreciation, recognition, and advocacy. The Transcultural Self-Efficacy Tool (TSET) was developed by Jeffreys (2006) to measure and evaluate confidence levels of nursing students working with clients of diverse backgrounds.

### **Review of Literature**

Many schools of nursing currently incorporate service-learning into their curriculum with the majority of projects evident in community health courses. Projects range from a mobile van serving rural communities (Hurst & Osban, 2000), to community-based care in underserved communities (Beauchesne & Meservey, 1999), to working with at-risk adolescents (Childs, Sepples, & Moody, 2003), to providing immunizations and health screenings (Ciaccio & Walker, 1998; Everson, Gierach, Dreke, & Dangel, 2005), and providing health fairs in communities (Dillon & Sternas, 1997). Unfortunately, many of these projects have not been evaluated formally to demonstrate the effectiveness for research-based practice.

Although, limited research evidence does exist to support the value of service-learning for nursing curriculums. In one study (Bentley & Ellison, 2005) a random sample of students was assigned to address the needs of pregnant teenagers via a service-learning project. The students attended prenatal clinic visits, assisted with ultrasound visits, and conducted home visits with the pregnant teenagers. The majority of students felt that the experience helped them to understand lectures and reading assignments. Statistical analysis indicated that students in the service-learning group scored higher on Test 1, the final exam, and the comprehensive maternity specialty exam at the end of the course.

Students enrolled in a women's health course were encouraged to develop sensitivity to the lived experience, increase their knowledge of community resources, and design an action plan for improvement of women's health care services (Callister & Hobbins-Garbett, 2000). Through service journals, students identified 5 benefits of the service learning experiences: a sense of personal satisfaction, professional growth, higher level of critical thinking skills, improved preparation for nursing practice, and increased awareness of unmet needs of clients.

Research conducted with student nurses in rural community health sites analyzed findings using an interpretive descriptive method (Van Hofwegen, Kirkham, & Harwood, 2005). The qualitative study was based on the theoretical perspectives of community health and service-learning. The convenience sample included undergraduate students, registered nurses, and one clinical instructor. The public health unit and home visits were utilized as clinical sites with students living in the community for a 2-week period. Four

themes emerged from the data: the nature of rural health communities, the autonomous role of the rural health nurse, opportunities for service-learning, and practicalities of the placement. Although the curriculum did not specifically use the term “service-learning,” the findings supported developing partnerships to build civic responsibility and service to the community. Findings based on qualitative data (Flannery & Ward, 1999) obtained from reflective papers, student-created pamphlets, and classroom observations with students enrolled in a health issues course identified three major themes: the development of ethnic consciousness, the development of cultural competence related to health issues, and the role of service learning to empower students to contribute to their community.

Similarly, only limited research exists to demonstrate effectiveness of strategies to teach cultural competence. Two groups of senior nursing students were evaluated for cultural competence and self-efficacy using the Bernal and Froman Cultural Self-Efficacy Scale (Alpers & Zoucha, 1996). The students that received cultural diversity theory reported higher confidence and competence in African-American economic style of living and employment patterns, and Hispanic beliefs in modesty. Students with no previous theory reported higher confidence in providing care to Asian clients, taking a history, recalling dietary intake, and developing a genogram. Faculty observations noted students with no previous training appeared to have greater difficulty in understanding and applying the concepts of transcultural nursing.

A study comparing baccalaureate nursing students’ pre-test and post-test scores to determine changes in self-perceived cultural competence utilized the Caffrey Cultural Competence in Healthcare Scale (Caffrey, Neander, Markle, & Stewart, 2005). Of those

students, a small group of students participated in a 5-week immersion experience to Guatemala. While all students received cultural diversity instruction during the program, post-test scores indicated that students perceived only moderate improvement in attitudes, knowledge, and skills during the program. The immersion students made greater improvements than the overall group. The non-immersion group scores indicated some lower scores on the post-test administration suggesting over-reported abilities and confidence levels.

The TSET measures students' self-efficacy perceptions in three dimensions: cognitive, practical, and affective. Findings from 4 studies utilizing the TSET with associate degree nursing students indicate that nursing students are least confident in the knowledge, more confident when interviewing clients, and most confident about their attitudes related to transcultural nursing (Jeffreys, 2000).

Two pilot studies were used to evaluate the effects of service-learning on the critical thinking skills, cultural competency, and civic engagement in students enrolled in a RN-to-BSN program (Nokes, Nickitas, Keida, & Neville, 2005). Competencies were measured with the California Critical Thinking Disposition Inventory, the Inventory for Assessing the Process of Cultural Competence, and an adapted version of a civic engagement instrument. Pre-intervention and post-intervention scores indicated slighter lower critical thinking and cultural competence scores and significantly higher civic engagement scores. Lower scores in critical thinking and cultural competence may have resulted from increased insight into the student's own self-efficacy as a result of the service-learning experience.

## **Method**

A convenience sample of 69 baccalaureate nursing students enrolled in a community health nursing course was used to evaluate self-perceived cultural competence following the completion of service-learning projects with local and international communities. Approval for the research project was received from the IRB of the university prior to the initiation of the study. Students worked in clinical groups to complete an in-depth community assessment, identify community health needs, develop an educational program, and implement the plan with their assigned community. A special emphasis is placed on working with at-risk populations, such as Latinos, African Americans, homeless, low-income school children, victims of domestic violence, and single-parent families.

Each student is required to complete a cultural assessment based on the Giger & Davidhizar Cultural Assessment Model (2004) and develop a culturally appropriate plan of care. Interviews are completed with key informants to learn the emic view of health care issues within the community. Statistical data is collected in order to analyze the community demographics, environmental issues, morbidity and mortality rates, educational levels and resources, socioeconomic levels, medical services available, employment opportunities, and housing. Based on the information gained through data collection and interviews, students work with community leaders to develop a plan for education and implementation. Working with community participants reflects the key concept of reciprocity that is integral to service-learning. All students are required to complete reflection notes prior, during, and after the service-learning projects.

Each spring one clinical group takes part in a one-week international service-learning program in Guatemala. Students taking part in this experience must meet the same objectives for their service project as students participating in projects with local communities. The Guatemala trip allows students to work with a multidisciplinary team as part of a medical mission in rural villages. Clinic opportunities include working directly with physicians to assist in minor surgeries and treatments, dispensing medications in pharmacy, teaching basic hygiene and dental care, and administering vitamins and parasitic medications. While fluency in Spanish is not required, students do learn key phrases in order to instruct patients regarding medications and basic education. Students also make home visits which allow them first-hand knowledge of the issues of poverty, culture, and health in a Latin American country. This knowledge can then be applied to their practice in the US with a steadily increasing Hispanic population.

The Transcultural Self-Efficacy Tool was administered at the beginning and completion of the semester. Students were provided with informed consent and voluntarily completed surveys based on their own perceptions of self-efficacy with transcultural nursing concepts. Nine students chose not to complete the voluntary post-surveys at the end of the course. A total of 60 pre-test and 60 post-test surveys were analyzed for statistical significance using SPSS software. Demographic data included a total of 60 students with 56 females and 4 males. Students were assigned to clinical sections for practicum experiences. A total of 7 clinical sections existed, one of which participated in a one-week international experience in Guatemala. Clinical sections ranged in size from 6 to 11 students per group. Over two-thirds (62%) of the students

were 21 years of age, while 32% were 22 years with the remaining 6% represented by 23 years or older. The majority of students (92%) indicated ethnic category as White with other ethnic groups reported as follows: African American (5%), Asian or Pacific Islander (2%), and other (1%). One hundred percent of the students reported English as their first language.

The TSET indicated adequate reliability as evidenced by an internal consistency of .974 with the pre-test and .986 with the post-test. Split-half reliability ranged from .731 on the pre-test to .860 on the post-test. The TSET instrument consists of 83 items using a 10-point rating scale (*1 = not confident to 10 = totally confident*). Construct validity of the TSET has previously been reported in the literature by Jeffreys (2000, 2006). The TSET consists of 3 subscales: cognitive, practical, and affective. The cognitive subscale consists of 25 items to assess students' confidence related to knowledge of cultural factors. The practical subscale consists of 28 items to evaluate confidence with interviewing clients of different cultural backgrounds. The affective subscale consists of 30 items to recognize values, attitudes, and beliefs related to cultural awareness, acceptance, and advocacy.

All completed surveys were analyzed based on total scores and subscale scores. Means for total scores and subscale scores were calculated for each clinical section (see Table 2.1). A paired-samples *t* test was calculated to compare the mean pre-test total score to the mean post-test total score. The mean of the pre-test was 606.68 (*sd* = 76.43) and the mean on the post-test was 719.20 (*sd* = 65.44). A significant increase from pre-test to post-test was found ( $t(59) = -9.995, p < .001$ ). The same paired-samples *t* test was

used to analyze each subscale score: cognitive, practical, and affective. For each subscale the pre-test mean score was compared to the post-test mean score. A significant increase was demonstrated in each subscale: cognitive [pre-test = 6.60 ( $sd = 1.29$ ), post-test = 8.43 ( $sd = .96$ ), ( $t(59) = -10.96$ ,  $p < .001$ ], practical [pre-test = 6.70 ( $sd = 1.27$ ), post-test = 8.34 ( $sd = 1.08$ ), ( $t(59) = -8.03$ ,  $p < .001$ ], and affective [pre-test = 8.46 ( $sd = .94$ ), post-test = 9.1 ( $sd = .65$ ), ( $t(59) = -5.40$ ,  $p < .001$ ].

Multivariate analysis was used to evaluate the effect of clinical section on pre- and post-scores. A one-way MANOVA was calculated examining the effect of clinical section on each subscale pre- and post-score. A significant effect was found for the cognitive scores ( $\text{Lambda}(12,104) = .661$ ,  $p = .032$ ), although the follow-up ANOVAs for pre- and post-cognitive score demonstrated no significant effect ( $F(6,53) = 1.787$ ,  $p > .05$ ). No significant effect was found with practical or affective scores ( $\text{Lambda}(12,104) = .736$ ,  $p > .05$ ), ( $\text{Lambda}(12,104) = .884$ ,  $p > .05$ ). No significant effect was found with total scores as well ( $\text{Lambda}(12,104) = .733$ ,  $p > .05$ ).

## **Discussion**

Cultural competence requires a continuous, evolving level of knowledge and skills in order to work with diverse populations. Self-perceived abilities of nursing students provide us with one measure for evaluation of competence levels. This study indicates that nursing students did perceive an increase in their abilities in cognitive, practical, and affective dimensions. Paired-samples  $t$  tests confirm this increase across all dimensions with the greatest gain in the cognitive area. Students perceived their greatest abilities in the affective dimension. These results are similar to the findings reported by



Jeffreys (2000). When multivariate analysis was conducted, testing demonstrated a significant effect on the cognitive subscore by clinical section. Further testing was unable to determine which group demonstrated the effect. This is probably due to the limited sample size, as groups consisted of 6-11 students.

It was initially hypothesized that the international group would demonstrate higher self-perceptions following the trip to Guatemala. It is significant to note that the international group scored lowest in subscores and total score on the pre-test; yet scored highest in all areas on the post-test (see Appendix). The researcher believes this occurred as a result of more realistic views of self-perceived abilities of the students taking part in the international study.

Several limitations do exist for this study. No control group was utilized to evaluate self-efficacy perceptions for students not involved in service-learning projects. Future studies may need to compare schools of nursing which do not teach community health through service-learning projects. While the overall group demonstrated sufficient sample size, analysis by clinical section was limited by group size. Analysis of clinical section is important to evaluate the effects of international activities versus local community service on cultural competence. It must also be recognized that students volunteered to take part in the international group. They submitted applications and raised their own funds to take part in the trip to Guatemala; thus they had a vested interest for increasing their cultural competence.

## **Conclusion**

Service-learning allows students to work with communities to address real-life health issues. Introducing students to cultural values and beliefs relevant to their targeted population initiates an awareness of the role culture plays in decision-making and health care practices. Students begin to see the health issue from a new perspective and must work with clients of diverse backgrounds to address health disparities. The hope exists that this awareness and use of knowledge and skills through encounters with different cultures will lead to an increased desire to provide culturally congruent care as they begin their roles as nurses of the future.

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**TABLE 2.1**

Comparison of TSET Mean Subscores  
and Mean Total Score by Clinical Section

		Pre-test Scores				Post-test Scores			
Clinical Section	Sample Size	Cognitive SEST	Practical SEST	Affective SEST	Total Score	pCognitive SEST	pPractical SEST	pAffective SEST	pTotal Score
201	9	6.32	6.23	8.49	587	8.33	7.60	8.96	690
202	9	6.93	7.27	8.20	623	8.97	8.85	9.23	749
203	6	6.70	6.71	8.69	616	7.90	8.18	9.08	699
204	9	6.77	6.88	8.45	616	8.53	8.34	9.07	719
205	11	6.54	6.59	8.47	602	8.20	8.24	9.07	708
207	10	7.02	7.00	8.67	631	8.08	8.22	9.22	709
*600	6	<b>5.61</b>	<b>5.95</b>	<b>8.18</b>	<b>552</b>	<b>9.12</b>	<b>9.26</b>	<b>9.56</b>	<b>774</b>

\* 600 denotes international group

## **CHAPTER THREE**

### **THE EFFECTS OF SERVICE-LEARNING ON THE LEARNING DIMENSIONS OF CULTURAL COMPETENCE: A QUALITATIVE ANALYSIS**

In 1893, Lillian Wald and Mary Brewster began their work under the title of visiting nurses by providing care to immigrant families in New York's Lower East Side (Rogow, 1966) and later established the Henry Street Settlement. Nurses in the United States (US) today face many of the problems that Lillian and Mary experienced in the late 1890s. They faced an influx of immigrants into the US, with each immigrant family bringing with them unique cultural values and health care beliefs which would influence their health in the United States. Today, nurses are again seeing this increase in minorities, who bring with them different cultural beliefs and practices. The need to provide culturally congruent care presents challenges for nurses and nurse educators. How can health care be provided to a diverse community with different languages and cultural practices? How can nurse educators teach a new generation of nurses to provide community-based care which respects and values different cultures?

Service-learning can provide an opportunity for nursing students to increase their awareness of social issues and enhance their cultural knowledge and skill, while providing community-based care to diverse populations. Several key professional documents have played a major role in promoting an emphasis on service-learning in communities. The National League for Nursing (NLN), *A Vision for Nursing Education Report* (1993), and the Pew Health Professions Commission (1998) both have advocated service-learning as a component of community health nursing. The NLN *A Vision for*

*Nursing Education Report* advocated for a shift in nursing education to a community-based and community-focused health care system which incorporated health promotion and prevention strategies for individuals and communities. The Pew Health Professions Commission identified service-learning as a key competency for students (Riner & Becklenberg, 2001) and called for an increased focus on public service, especially in the community (Kulewicz, 2001). *The Essentials of Baccalaureate Education for Professional Nursing Practice* (American Association of Colleges of Nursing, 2008) emphasizes the professional values of baccalaureate education which include a sense of social justice to assure equal treatment and access to care for all people.

According to the US Census Bureau, the diversity of the nation is rapidly changing. Between 2000 and 2005, significant increases (19.7% and 20.9%, respectively) were documented in the Asian and Latino populations (US Census Bureau, 2007). The White and African American populations only saw small increases (4.5% and 6.2%, respectively). According to the American Nurses Association (2006), the 2004 National Sample Survey of Registered Nurses (RNs) indicated that 94.2 % of RNs were female and 5.8% were male. Of the nurses who indicated their racial/ethnic category, it was estimated that 81.8% were White, non-Hispanic; 4.2% were Black/African American; 2.9% were Asian; 1.7% was Hispanic; 0.3% was American Indian/Alaskan Native; 0.2% were Pacific Islander; with the remainder a combination of races. While the nation is experiencing a growth in diverse cultures, nursing as a profession has remained basically homogeneous. Service-learning in communities can provide one avenue for introducing nursing students to different cultural perspectives through



encounters with diverse populations. The purpose of this qualitative study is to describe the effects of service-learning on the learning dimensions of cultural competence in baccalaureate nursing students.

### **Background**

According to Jacoby (1996), service-learning provides experiential education while students engage in activities to address community needs through structured learning opportunities. Learning may take place in local neighborhoods, the state, the nation, or global regions. The current practices of service-learning began in the 1960s, but its historical roots can be traced back to the 1860s with progressive education and settlement house activities (Stanton, Giles, & Cruz, 1999). According to Stanton et al. (1999), the earliest definitions of service-learning describe “the accomplishment of tasks that meet genuine human needs in combination with conscious education growth” (p. 30). It is important to distinguish between community service and the experiential education of service-learning. Service in the community has been evident in education since the early 19<sup>th</sup> century, yet it is the role of the faculty as a facilitator and the focus on critical reflection in recent years that sets service-learning apart (Weatherford, 1998). Service in the community focuses primarily on the activities which benefit the recipient of service with less focus on the reciprocal learning that occurs in true service-learning.

Service-learning is an educational practice that combines service and academic learning to assist students with their understanding of course content in relationship to social issues (Hurd, 2006). This pedagogy emphasizes meaningful student learning through active, project-based learning. Active learning is emphasized with a move away

from teacher-centered lectures to student-centered, participatory classroom strategies (Hurd, 2006; Kulewicz, 2001). The intent is to develop students who are “expert learners;” thereby assessing new situations and gaining new knowledge to address problems through a wide range of skills.

Reflection and reciprocity are key concepts of service-learning (Ciaccio & Walker, 1998; Jacoby, 1996; Young, Bates, Wolff, & Maurana, 2002). Structured reflection is a cornerstone component of service-learning and stimulates cognitive growth. Service-learning seeks to combine community service action with course objectives, preparation, and structured reflection. Courses which incorporate service-learning encourage a deeper understanding of course material and the complex problems that people face in society. Reciprocity is encouraged as students achieve content mastery through apprenticeship and social activities with members of the community.

Service-learning in communities provides an opportunity for nursing students to apply the concepts of transcultural nursing. Transcultural nursing is defined as a formal area of study and practice to focus on the differences and similarities of beliefs, values, and patterned lifeways of diverse cultures in order to provide culturally congruent health care (Leininger & McFarland, 2002). According to Leininger et al. (2002) the goal of transcultural nursing is to prepare new nurses to be knowledgeable, sensitive, competent, and safe to care for diverse groups of people. According to Jeffreys’ Cultural Competence and Confidence Model (2006), cultural competence is a multidimensional learning process that involves three dimensions: cognitive, practical, and affective. The cognitive dimension focuses on knowledge and intellectual abilities. The practical

dimension involves the application of verbal and non-verbal communication during interviews with clients. The affective dimension entails attitudes, values, and beliefs. This dimension includes self-awareness, awareness of cultural differences, acceptance, appreciation, recognition, and advocacy. A similar model proposed by Campinha-Bacote (2003) defines cultural competence as a process of cultural awareness, cultural knowledge, cultural skill, with the addition of cultural encounters and cultural desire. Cultural encounters allow nurses to participate in cross-cultural experiences. Cultural desire reflects a desire to engage in the provision of culturally competent care.

### **Method**

An explanatory case study design was utilized to address the qualitative component within a larger study. According to Yin (1993), an explanatory case study explains causal relationships. This type of study presents data which has bearing on the cause-effect relationship; thereby explaining how events happened. A case study is “an in-depth exploration of a bounded system” (Creswell, 2002, p. 485). This study used a collective approach with multiple cases, bounded by their enrollment in a community health nursing course, which required involvement in a service-learning project. Approval for the study was obtained through the university institutional review board prior to data collection.

### **Sample**

The study population consisted of a purposeful sample of senior level baccalaureate nursing students enrolled in a community health course at a public university in the southeastern United States. All students enrolled in the course were

required to participate in service-learning projects to meet the population-based clinical objectives. Students were assigned to clinical groups which conducted community assessments, identified health education needs, and delivered health education based on the specific needs of the target population. Two clinical groups were selected to participate in the qualitative component of the study. Students were informed in writing and orally about their rights to participate voluntarily, withdraw without course penalty, and expect anonymity. A written consent was obtained from each participant. Clinical Group A and B each consisted of 8 students. Ages ranged from 21 to 24 years and were first-time enrollees in a baccalaureate program. Clinical Group A consisted of 7 females and 1 male, all of which were self-identified as Caucasian. Clinical Group B consisted of 7 females and 1 male. Ethnic categories for this group included 7 Caucasians and 1 Asian (female). All participants identified English as their first language.

### **Description of Settings**

Clinical Group A conducted a community assessment in a local, urban area at the request of a community taskforce to address the health needs of a predominantly African American neighborhood. Students interviewed community leaders and attended the monthly taskforce meeting to be introduced to participants. Articles from nursing literature related to health and diet practices of African Americans were required reading. Statistical data was obtained related to the community to include population trends, education levels, socioeconomic status, religious influences, occupation rates, birth and death rates, morbidity and mortality rates, infectious diseases, health agencies, governmental influences, and recreational facilities. Based on the information gained

from statistical data and community informants, a health fair was planned and implemented at a local school for a Saturday morning. The health fair provided screenings for total cholesterol, glucose, height/weight and body mass index, and blood pressure. In addition, health education tips to control blood pressure and heart disease along with nutrition information were made available. Students from the university's nutritional science and public health departments assisted with door prizes and preparing healthy food choices. Over 100 people participated in the health fair and took advantage of the available health services.

Clinical Group B participated in a short-term medical mission trip to Macas, Ecuador. Students conducted similar community assessments using statistical data available via the internet and library resources. Although the cost of phone calls was prohibitive for interviews with community leaders in Ecuador, students did conduct key informant interviews with members of previous medical missions who had traveled to similar regions of Ecuador. The availability of technology was very limited and sometimes non-existent in remote regions of Ecuador; thus making interviews by internet non-feasible. Students were required to read several articles from nursing and medical literature that explored current health problems in Ecuador. Based on the information obtained, students prepared educational materials to focus on basic hygiene, handwashing, food and water safety, and dental care. Students collected toothbrushes, soap, and other hygiene products to be distributed during the trip. As part of the preparation for the trip, students participated in introductory sessions of medical Spanish. All of the students had previous experience with high school or college level Spanish,

with the exception of one student. No student was considered fluent in Spanish. The trip took place over the spring break vacation and consisted of a total of 7 days. Three days were spent in travel; via airline, bus, and personal vehicles. The remaining four days were spent conducting medical clinics with the Shuar Indians in remote regions of southern Ecuador. Each clinical day involved setting up a make-shift clinic, providing triage, administering de-worming medications and vitamins, preparing prescriptions in pharmacy, assisting physicians with procedures, making house calls to people unable to walk to the clinic site, and teaching basic hygiene and dental care. Additional cultural opportunities included a jungle/river hike, local cathedrals, a church service, a visit to a nature preserve, a cable car ride, and shopping at a local native market. These cultural excursions provided opportunities for students to gain insight into religious practices, to observe the availability of consumer products, and to broaden their experiences of the local culture and environment.

### **Data Collection**

Each student was obligated to maintain reflection notes as a requirement of the service-learning component of the community health course. By collecting the reflections of all students within a clinical group, this allowed for a purposeful sampling strategy which facilitated maximum variation within the clinical groups. Students were provided with a semi-structured outline of questions to guide reflection notes. Each question was open-ended and provided a stimulus for critical reflection of the service-learning activities. These questions were based on Borton's Developmental Model for Reflective Practice (Borton, 1970). According to Borton's Model, the process begins

with a description of the learning experience (“What?”) and is followed by a cycle of analysis and synthesis to identify the relevance of the learning experience (“So What?” and “Now What?”). Reflection notes were required to be completed prior to, during, and at the conclusion of the service-learning project.

The researcher/instructor of the service-learning projects provided supervision and worked directly with both clinical groups during their field experiences. These activities allowed the researcher to function as a participant-observer. The researcher maintained field notes with extensive memoing to document the clinical experiences and relevant events. Events were documented with photos in both experiences, although the Ecuadorian trip resulted in a more extensive collection of photos. Additional artifacts were collected from both groups, which included relevant articles for both Ecuadorian culture and African American culture, communication notes between the instructor and students, flyers and handouts prepared for the health education, and binders completed by students to document their service-learning project.

### **Data Analysis**

The analysis phase began with constant comparison of the student reflection notes to identify themes based on written descriptions of observations, feelings, and thoughts. The written reflection notes were the direct wording of students. A within-case analysis was performed with each clinical group and a cross-case analysis was performed to compare themes between the two groups. Each clinical group was designated as a single case consisting of multiple cases within the group. When multiple cases are used, it is common to provide a description of each case and themes within the case and follow with

a thematic analysis across the cases (Creswell, 1998). Once themes were identified within and across groups, analysis continued in an effort to reflect upon the similarities and differences of the clinical groups. Themes were categorized based on the 3 learning dimensions of cultural competence as noted by Jeffreys (2006): cognitive, practical, and affective. Themes were categorized according to Jeffreys' Cultural Competence and Confidence Model in order to facilitate linking the quantitative and qualitative findings as part of a larger study.

Verification was established through data triangulation as evidenced by multiple sources of data, including field notes and memoing, student reflection notes, student documents, documentation of key informant interviews, service-learning project binders, photos, and participant observation. The use of multiple and different sources of information in triangulation allows the researcher to corroborate evidence (Creswell, 1998). An audit trail was created through the use of field notes. The field notes served a two-fold purpose as the researcher documented research activities and at the same time established researcher reflexivity (Creswell, 1998) by reporting personal beliefs, values, and biases that might affect the inquiry of the research topic. According to Lincoln and Guba (1985), triangulation of data helps to establish credibility, while dependability and confirmability of the data is ensured by auditing of the process. A final step of analysis was completed by the co-author in the form of a peer review. The co-author has extensive experience in service-learning and qualitative research. Peer review adds an external check to the process of verification (Creswell, 1998).



## Results

Emerging themes were identified in both clinical groups related to the 3 learning dimensions of cultural competence. While Jeffreys (2006) specifically addresses the practical learning dimension as the process of interviewing clients of different cultural backgrounds, this researcher broadened the practical dimension to include psychomotor skills which were utilized during interviewing, direct care, and client teaching. According to Campinha-Bacote (2003), cultural skill includes the ability to collect cultural data and perform a culturally-based, physical assessment.

The within-case analysis of Clinical Group A revealed 4 themes: 1 cognitive dimension, 1 practical dimension, and 2 affective dimensions. Clinical Group B revealed 6 themes: 1 cognitive dimension, 2 practical dimensions, and 3 affective dimensions. The cross-case analysis of the two clinical groups revealed similar themes, yet the students who participated in the Ecuador trip were able to provide more specific details related to their learning experiences.

In the cognitive dimension, Group A perceived learning about the culture of the community as an integral part of the service-learning project.

*“I learned about the community. I learned about the dietary habits of African Americans, the increased risk of hypertension, and also the increased risk of diabetes.”*

Group B reflection notes provided examples of specific knowledge gained regarding areas of cultural phenomena consistent with Giger and Davidhizar’s Cultural Assessment Model (2004).

*“We learned more about the Shuar Indians and their culture...discovered their beliefs about curses, and heard about the child birthing process. ...They drink a homemade alcohol drink from the Yuca plant. ... Females are very important and the central focus of the Ecuadorian people. ... The family wanted to know if someone had given it (infant) “the evil eye.”*

In the practical dimension, Group A noted that the service-learning experience allowed them to provide client education for a population in need.

*“I felt that we really helped a few people, when they had glucose levels of 246, 314, etc... they had no clue what that meant or what they should do. I was able to tell them the health treatment they needed to seek and signs/symptoms of this problem.”*

Group B wrote of gaining confidence in Spanish-speaking skills and teaching clients about specific health topics.

*“I spoke more Spanish today than I have in all my years of Spanish classes combined...I was able to pick out words and phrases in Spanish and understand what the patient was saying for the most part.”*

This student also wrote,

*“I did the education station where I taught kids to wash their hands and brush their teeth and handed out toothbrushes.”*

In the affective dimension, Group A noted a greater degree of anxiety and confusion in the early stages of the project, but did feel that the service-learning projects

made them more aware of the influence of community practices and values in the planning and delivery of health care.

*“It will be a learning experience working with such a diverse population because I have not had the opportunity to work with a large group of African Americans. I am apprehensive because I do not know a lot about their culture.”*

An additional student wrote,

*“In order to problem solve you must look at the problem by understanding how to solve that problem by researching the community itself. I learned how important it is to work within the community, because if you don’t know about the community, then you don’t know the community people.”*

In this affective dimension, Group B indicated increased awareness of poverty, and personal encounters with people of different cultures through clinic experiences and home visits, and perceived the experience as a positive influence on their nursing practice with diverse populations.

*“Being there made me realize how much their health takes a toll because of their poverty. It is one thing for me to know it in my head that people are poor and can’t get medical care, but to sit and hold the hand of an elderly woman with congestive heart failure who can’t afford or go to a pharmacy to get appropriate medication makes the situation so real.”*

An additional student wrote,

*“I learned the importance of respecting cultural differences... the time in Ecuador has truly changed my perspective on healthcare... At first, I was overwhelmed by their needs and felt as though we wouldn’t even make a dent. But as the week went on, I realized that we did have a huge impact, not only with medicine, but with the love we showed. To me, community health nursing means reaching out to the forgotten patients, the ones without support.”*

Clinical experiences which allow students to work with diverse cultural groups provide opportunities for cultural encounters. These encounters facilitate modification of students’ existing beliefs about a cultural group and decrease the potential for stereotyping (Campinha-Bacote, 2003). Participants in this study indicated an increase in cultural knowledge and comprehension of relevant cultural factors through the cognitive dimension, an improvement in patient communication skills through the practical dimension, and an increased awareness through the affective learning dimension. The context and involvement with the community seemed to play an important role in the depth of learning experienced by student nurses. The students who participated in the Ecuador trip were able to provide more explicit details of culturally relevant knowledge and experiences. This finding is consistent with a study by St Clair and McKenry (1999) where students who engaged in short-term cultural immersion experiences were able to discuss culturally diverse patient care with greater sensitivity and understanding than students who did not travel outside the US.

## **Discussion**

Several researchers have studied perceptions of cultural competence in nursing students. Post-test scores indicated that students who participated in an immersion experience in Guatemala made greater improvements in attitudes, knowledge, and skills than non-immersion students (Caffrey, Neander, Markle, & Stewart, 2005). Two pilot studies conducted by (Nokes, Nickitas, Keida, & Neville, 2005) represent attempts to link service-learning and cultural competence in nursing students. Post-interventions scores indicated lower critical thinking and cultural competence abilities. This decrease may have resulted from greater insight into the student's own adjusted perception of cultural competence self-efficacy. When students began courses they felt confident of their cultural competence, but as time passed they began to recognize their own inadequacies. Recognition of these inadequacies may have accounted for the lower post scores. Four studies reported by Jeffreys (2000) utilizing the Transcultural Self-Efficacy Tool (TSET) with an associate degree nursing program found that students were least confident in knowledge, more confident in interviewing, and most confident in their attitudes. The qualitative findings of this current research study seem to indicate that baccalaureate nursing students improved in all 3 dimensions with the international group making the most significant gains. Taken at face value the thematic analysis identified the greatest number of themes in the affective dimension for the international group.

The students who participated in the Ecuador trip volunteered and procured substantial funding in order to participate in the medical mission. What role did motivation play in the desire to increase cultural competence? According to Campinha-

Bacote (2003), cultural desire requires a personal sacrifice. A person must be willing to work with culturally diverse clients. The researcher believes that the caring nature of nurses provides an intrinsic factor which influences the willingness of nurses to seek cultural awareness, knowledge, and skill. Cultural encounters provide the opportunity to move along the continuum toward cultural competence. The students taking part in the international trip made a personal sacrifice (money, spring break vacation, hard work). Most nursing students would welcome the chance to take part in an international experience; unfortunately, money is a major deterrent.

One theme that emerged from the data with Group A indicated that student experienced heightened feelings of anxiety and confusion in the early stages of the project. These feelings may be a result of the absence of the clinical instructor on the day of orientation for community health. Although other faculty were available to answer questions and clarify objectives of the service-learning projects, students still reported significant anxiety and confusion. While the absence of the instructor may have contributed to the uncertainty, service-learning projects with a different cultural group may invoke considerable anxiety in itself. Group B did express some anxiety, but the anxiety seemed to be overshadowed by positive influences such as excitement and the potential to be a life-changing event.

### **Limitations**

Several limitations do exist within this qualitative study. Reflection notes were used in lieu of face-to-face interviews, making participant clarification impossible. Member checking which adds to validity in qualitative inquiry (Creswell & Miller, 2000)

was not feasible in this study. All students involved in this study graduated at the end of the semester with many of them moving out-of-state. Future studies should include at least one follow-up interview to confirm the credibility of the information. While Clinical Group B was a self-selected group who volunteered to take part in the medical mission, Clinical Group A consisted of students who were randomly assigned to a clinical group. Availability of funds and family or work commitments of nursing students make random selection of international participants non-feasible at the time. Grants to cover the student costs of the international experiences would help to establish greater transferability of findings. Using a specific theoretical framework, the Cultural Competence and Confidence Model, to categorize themes may have limited the ability of the researcher to disconfirm evidence. Qualitative researchers have a tendency to find confirming rather than disconfirming evidence (Creswell & Miller, 2000). While all themes were consistent with at least one category of learning dimensions, there were data that potentially could have been categorized in more than one learning dimension. Efforts are being made to confirm categories in order to link the qualitative findings with quantitative findings from the larger, mixed-method study.

### **Implications for Nursing Education**

Not every student can take part in an international experience in order to increase cultural competence. There are components of the international experience that could be incorporated into clinical practicums at the local level. Clinical experiences in local communities should allow students to see as many aspects of the daily life as possible. Making home visits, eating the food common to the ethnic group, conducting in-depth

cultural assessments, and attending religious activities are all activities that provide a new perspective of an otherwise unknown culture. It is suggested that faculty make a special effort to plan service-learning projects with different cultural groups. Schools of nursing routinely provide community service, but in order to truly implement a service-learning project reflection must take place to stimulate changes in perspectives. Activities to facilitate reflection may include journaling, focus groups, interviews, or post-conferences.

### **Conclusion**

Service-learning conducted in collaboration with diverse communities did increase self-perceived cultural competence in these groups of baccalaureate nursing students. Future nursing research needs to examine the behavioral outcomes of cultural competency compared to self-efficacy perceptions of cultural competency. This study attempted to explain the perceptions of cultural competence in nursing students following one specific teaching intervention, service-learning. Teaching cultural knowledge has been the major focus on most nursing curriculums. Many faculty are beginning to incorporate opportunities to increase cultural skills. The future must include structured, planned clinical experiences for cultural encounters. Cultural encounters may have the greatest significance for increasing the cognitive, practical, and affective learning dimensions of cultural competence.



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**CHAPTER FOUR**

**THE INFLUENCE OF INTERNATIONAL SERVICE-LEARNING ON  
TRANSCULTURAL SELF-EFFICACY IN BACCALAUREATE NURSING  
GRADUATES AND THEIR SUBSEQUENT NURSING PRACTICE**

Members of The American Academy of Nursing Expert Panel on Global Nursing and Health, The Transcultural Nursing Society, and The American Academy of Nursing Expert Panel on Cultural Competence have established a proposed set of universal standards of practice for culturally competent care (Douglas et al., 2009) for nurses to serve as a guide for clinical practice, research, education, and administration. The challenge for nurse educators is to apply specific pedagogies which demonstrate through research that nursing graduates are prepared to meet these standards of care. Nurse educators are in the process of investigating cultural competency outcomes for nursing students through both quantitative and qualitative research methods (Alpers & Zoucha, 1996; Bentley & Ellison, 2007; Jeffreys, 2000; Kardong-Edgren & Campinha-Bacote, 2008; Napholz, 1999; Nokes, Nickitas, Keida, & Neville, 2005; Rew, Becker, Cookston, Khosropour, & Martinez, 2003). Still, a need exists to identify which pedagogies are effective for teaching cultural competence.

Service-learning is one pedagogy which supports several of the universal standards for the practice of culturally competent care. Service-learning provides opportunities to address social justice, critical reflection, transcultural nursing knowledge, cross cultural practice, and cross cultural communication through community-based experiential learning. International service-learning is a structured learning experience

where students accompanied by faculty travel to different countries and immerse themselves in a culture different than their own (Grusky, 2000). Students work in communities where they are staying, engage in cultural encounters, and experience a new perspective on daily life. According to Campinha-Bacote (2003), cultural encounter “is the process which encourages the healthcare professional to directly engage in face-to-face interactions with clients from culturally diverse backgrounds” (p. 48). Cultural encounters are an essential component of the process of cultural competence, which involves awareness, knowledge, skill, encounters, and desire.

### **Conceptual Framework**

The Cultural Competence and Confidence (CCC) Model (Jeffreys, 2006) attempts to “explain, describe, influence, and/or predict the phenomenon of learning (developing) cultural competence” (p. 25). This model supports the major construct of transcultural self-efficacy (TSE), which is the perceived confidence to perform transcultural skills. Cultural competence is a multidimensional learning process that involves three dimensions: cognitive, practical, and affective. The cognitive dimension focuses on knowledge and comprehension of cultural factors which influence care of diverse populations. The practical dimension involves the application of verbal and non-verbal communication during interviews with clients. In this study, the researcher has expanded this learning dimension to include communication during patient teaching and communication required for direct nursing care. The affective dimension entails attitudes, values, and beliefs. This dimension includes self-awareness, awareness of cultural differences, acceptance, appreciation, recognition, and advocacy. The learning

dimensions of cultural competence are directly influenced by TSE. As the student's TSE (confidence) level increases in transcultural skills, the student is more likely to engage in culturally congruent care. Cultural competence is most effective when all three learning dimensions are actively engaged.

Service-learning is a pedagogy which emphasizes meaningful student learning through active, project-based learning while providing service in the community. Students apply theory and classroom knowledge by addressing community issues while working with members of the community. Assessing new situations and gaining new knowledge to address problems through a wide range of skills allows the student to become an expert learner. It combines service and academic learning to facilitate students in understanding how classroom content relates to larger societal issues (Hurd, 2006). A required reflective component encourages personal growth, social growth, intellectual growth, citizenship, and preparation for the world of work (Duckenfield & Swanson, 1992). Courses that incorporate service-learning encourage a deeper understanding of course material and the complex problems that people face in society. Service-learning enhances students' engagement with the community and increases civic responsibility. Service-learning promotes cross-cultural understanding as many students experience a sense of "shock of awareness" which leads to self-awareness of others different from the students. Students must be prepared to take part in activities, engage in meaningful community service with adequate supervision, reflect critically on their experiences, and be recognized for their contributions. It is essential that students be prepared to take part in service-learning activities, otherwise stereotypes and biases may

be reinforced. Evaluation of service-learning should measure personal student development, including affective and cognitive domains of learning (Weatherford, Owens, Weatherford, & Fisk, 2003).

### **Review of Literature**

Nurse educators have conducted research to measure short-term and long-term outcomes of international or immersion experiences with nursing students. Some researchers have attempted to link these experiences with cognitive, practical, or affective dimensions which influence cultural competence. One of the earliest studies to evaluate the effect of an international study with nursing students attempted to analyze the impact of a 3-month international program on the cognitive development of senior baccalaureate students (Zorn, Ponick, & Peck, 1995). This quasi-experimental study collected quantitative data through the use of the Measurement of Epistemological Reflection survey with 8 students who participated in a semester abroad program and 20 non-participating students. Data collection was conducted during the first week of classes and again 3 weeks after the students returned to the United States. Significant differences were found between the two groups, with the international study group indicating a positive influence on their cognitive development. One limitation to this study was the small sample size.

A grounded theory methodology was used to explore the meaning of an international experience for nursing students and to discover what community health nursing concepts were reinforced (Haloburdo & Thompson, 1998). Fourteen students who had taken part in international programs to either the Dominican Republic,



Nicaragua, or The Netherlands participated in 1-hour interviews with the investigators. The data analysis revealed personal and professional growth, empirical knowledge, and the learning experience. The researchers suggest that the length of the trip may be less important than the specific type of experience, since students indicated that trips longer than 2 weeks would have prevented them from being able to participate due to family and job obligations. Unfortunately, information is not provided about the specific types of activities in which students took part during the international experiences.

St Clair and McKenry (1999) conducted a mixed-methods, exploratory study with quantitative and qualitative data to examine the relationship between cultural immersion, cultural self-efficacy, and cultural competence. The purposive study included 200 undergraduate and graduate students, and with 80 students (50 undergraduate and 30 graduate) who took part in an international experience over a 2-year period. Cultural self-efficacy was measured with the Cultural Self-Efficacy Scale (CSES), which was originally developed for community health nurses. The developers of the CSES note that the scale should be used with caution for students (Coffman, Shellman, & Bernal, 2004; Kardong-Edgren & Campinha-Bacote, 2008). Cultural competence was analyzed based on participant observation and the journal entries of students from 2-3 week immersion experiences. A statistically significant increase was noted on the total CSES score for all students. Post hoc analysis indicated a significant difference in the general and specific cultural self-efficacy scores in the students who took part in the international experiences. Qualitative analysis revealed that students who took part in the immersion experience began to challenge their own beliefs and values, increased awareness of themselves and

others, began to understand other worldviews, and recognized the effects of prejudice, politics, and poverty. While exemplars indicate that students did work with patients, it is unclear to what extent study abroad students did engage in direct nursing practice during the experience.

Bentley and Ellison (2007) reported using a service-learning framework to provide an international experience with senior-level baccalaureate nursing students in Ecuador. Students enrolled in an elective nursing course, which included classroom topics on cultural competence, cross-cultural communication, clinical decision-making, empowerment, health management, and cultural aspects of epidemiology. In addition, students took part in a weekend experience with Servants in Faith and Technology. The students then participated in an 8-day trip to Ecuador, where they worked in a health clinic in Atacucho to provide health education to women of the community. Students worked in the pharmacy, assisted nurse practitioners, provided triage to patients, and worked with translators to obtain medical histories. The Inventory for Assessing the Process for Cultural Competence Among Healthcare Professionals-Revised 2002 (Campinha-Bacote, 2003) was used to evaluate cultural competence before and after the trip. Results indicated that all students increased their cultural competency scores. Sample size was not reported. The greatest gains were noted in assessment of diverse cultures with students indicating an increased awareness of the importance of a cultural assessment and the awareness of cultural limitations. An exploratory, descriptive study to identify key experiences of students and faculty following a service-learning experience to Guatemala (Walsh & DeJoseph, 2003) was conducted with 10 students and

2 faculty. One interview was completed with each student and faculty member prior to the trip and one follow-up interview was completed post-trip. During the international experience, students visited with a community health nurse and made home visits. Findings indicate that students and faculty increased their awareness of the global community.

Researchers have attempted to evaluate the long-term effects of international experiences as well. Students at George Mason University take part in an international experience in Nicaragua each year. Undergraduate students conduct family and community assessments and work in health clinics. Graduate students in the nurse practitioner program work in the barrio, clinics, and primary care sites. Following six years of the international trips, faculty contacted 12 students and asked them to describe in their own words the effects of the experience on their personal and professional lives (Kollar & Ailinger, 2002). Using the International Experience Model as a framework, the authors report substantive knowledge, preceptual knowledge, personal growth, and interpersonal communication as a result of the experience. No information is provided related to the length of time between the international experience and the time of the interview. Most of the qualitative data reported indicated a heightened awareness and sensitivity to cultural issues. A descriptive, qualitative study with 6 former baccalaureate students was conducted through individual written narratives and a focus group (Evanson & Zust, 2006). Two years previously, students had taken part in a international trip to Guatemala over spring break, where they had participated in hands-on nursing activities. Most of the themes reported changes in affective learning with increased cultural

awareness and advocacy. A modified grounded theory study was completed using focus groups with 9 participants (Ryan, Twibell, Brigham, & Bennett, 2000) who had previously taken part in immersion experiences. Outcomes of the experience included changed values, increased communication skills, personal and professional growth. This study did not indicate the types of activities that nursing students engaged in during their experience.

Clearly, nurse educators are providing research-based evidence that international study is important for increasing cultural awareness and sensitivity for nursing students. More research is needed to link specific educational strategies with clinical practice. The process of cultural competence indicates that cultural knowledge and practical skills are important for providing culturally congruent care (Campinha-Bacote, 2003); thus it is critical to evaluate outcomes beyond just raising awareness and increasing sensitivity.

## **Method**

### **Research Design**

This qualitative, explanatory case study addresses the following question: How does participation in an international service-learning project during a community health course influence transcultural self-efficacy of baccalaureate nursing students following graduation and their subsequent clinical practice? A case-study is “an in-depth exploration of a bounded system based on extensive data collection” (Creswell, 2002, p. 485). Explanatory case studies attempt to explain causal relationships by presenting data which have bearing on the cause-effect relationship (Yin, 1993). One purpose of a explanatory case study is to identify or develop concepts at the onset of the study, so that

the lessons learned from the cases will help to increase the knowledge and understanding of a particular topic. In addition, this study may be considered a collective case study since it uses multiple cases to provide insight into a group activity (Creswell, 1998). The bounded system for this study involved 22 students who had participated in an international service-learning experience while enrolled in a community health nursing course within the last 3 years.

Approval for the exempt research study was obtained through the university Institutional Review Board prior to implementation. Telephone interviews were conducted with 14 students. The telephone interviews were semi-structured with several demographic questions and 5 open-ended questions. Duration of the interviews averaged 20-30 minutes. Interviews should be short (Creswell, 1998; Novick, 2008) and consist of 5-6 open-ended questions (Creswell, 1998). Research (Kobak, Williams, Jeglic, Salvucci, & Sharp, 2008; Novick, 2008; Opdenakker, 2006) indicates that telephone interviews are equally as effective as face-to-face interviews.

The semi-structured questions (see Appendix) and telephone script were developed. In order to evaluate the appropriateness of the questions, for both content and time requirements, the sample questions were sent to a nurse educator with extensive transcultural expertise for feedback. Additionally, the questions were piloted with 2 nursing faculty who had recently taken students to Ecuador and one student who had taken part in a similar trip to Ecuador. All participants and the expert agreed that the definitions of cognitive, practical, and affective learning dimensions should be reviewed with participants prior to the actual interview questions to ensure a consistent

understanding of the terminology. All pilot interviews were completed within the allotted 30 minute timeframe.

## **Sample**

Between 2006 and 2008, a total of 22 senior-level baccalaureate nursing students participated in a medical mission trip to Guatemala or Ecuador over spring-break week. A total of 21 females and 1 male had participated in the trips over the 3-year period. All students were enrolled in a public university and seeking their first undergraduate degree. No student was greater than 24 years of age at the time of the trips. Since all of the participants had graduated and many had moved into other areas of the state and country, the investigator did not have contact information for all 22 nursing graduates. The investigator used *Facebook*, an internet social networking program to locate 18 of the 22 nursing graduates, to locate 1 nursing graduate through the university alumni association, and to invite the graduates to participate in the study. Five graduates chose not to participate in the study. Three graduates could not be located. All the nursing graduates who participated in the study had been employed or volunteering in a nursing role since graduation. Nursing experience varied from 1-3 years depending on the year of graduation. Further demographic information was removed from transcripts in order to protect the identity of the participants and to ensure confidentiality within the study.

Graduates who were located via *Facebook* were asked to send their current email addresses to the investigator. Once graduates responded to the investigator through a private email account; the investigator sent the invitation to participate and an information sheet describing the study, risks, benefits of the study, and issues of informed

consent. If the graduates were willing to participate, they returned an email to the investigator with a phone number and a convenient time for the interview. All participants used cell phones with unlimited minutes during the interviews, so no cost was incurred for them. One graduate living outside the United States participated in the interviews, but only the investigator incurred costs for the international call.

### **Data Analysis**

Each telephone interview was recorded and converted to a .wav audio format for transcription. Each interview was transcribed verbatim. All transcripts were verified with the audio recording to ensure accuracy. During each interview, the investigator completed brief interview notes in the event the recording equipment failed. Field notes were completed starting with the initial data collection and continued through the data analysis phase along with extensive memoing to document the process; thereby creating an audit trail. Constant comparison began with the first interview and continued through the analysis phase. Once all transcripts were verified for accuracy, the investigator reviewed transcripts and identified initial codes. In addition, public documents (newsletters, newspapers, university-sponsored magazines) which documented the activities and reflections of participants following the international trips were reviewed to compare with transcripts for other potential codes. Initial codes were identified in the transcripts and documents, and eventually moved to a visual grid to facilitate clustering. After codes were clustered, they were collapsed into themes and subthemes.

Creswell (1998) refers to verification versus validity to differentiate between qualitative and quantitative research. It is suggested that qualitative researchers engage

in at least 2 verification procedures. This researcher used triangulation between multiple sources of data to corroborate evidence (audio recordings, typed transcripts, field notes, various public documents), clarified researcher bias at the onset of the study in field notes, performed member checks, and sought peer review with an expert in transcultural nursing. Additional procedures which added rigour to the study involved the use of an audit trail and extensive memoing. Credibility was maintained through verbatim transcripts of interviews. Confirmability was established through member checking. Credibility and confirmability add rigor to qualitative research methods (Leininger & McFarland, 2006).

## **Results**

The major themes and subthemes were identified through a process of eliminating redundancies and codes that could not be categorized (Creswell, 2002). Once themes were identified, they were categorized based on Jeffreys' Cultural Competence and Confidence Model for learning dimensions of cultural competence. Themes were categorized according to cognitive, practical, or affective.

### **Cognitive theme.**

*Cognitive learning was gained regarding family function and structure, diet practices, and health beliefs of specific ethnic groups.* Family function involves the affection within a family, socialization patterns, and health care beliefs and values. Family structure involves communication patterns, power structure, role structure, and family values (Friedman, Bowden, & Jones, 2003). Graduates discussed recognizing that Hispanic patients expressed pain differently than whites or African American patients.



Ethnic foods played an important role in the care of the patients. Many Hispanic families preferred to bring their food from home to the hospitalized patient. Observing diet practices, while in Guatemala and Ecuador, helped the nursing graduates to understand the value of bringing food from home rather than eating in the cafeteria for many Hispanic families. Many graduates spoke of the Hispanic families being family-oriented with the male in the family as being the leader of the family. Natural herbs are important in the health practices of the families they cared for in their nursing practice. They also recognized the need to incorporate the family into the plan of care. Participants spoke of experiences with communication with the decision-maker in the family. One graduate spoke of a situation where a drowning victim was brought to the intensive care unit.

*“We were doing everything we could to keep him alive. ... “Is this what you want?” She’s (mother) like, “No, absolutely not.” “He’s already gone. We need to give him respect and not keep this on.” Whereas in the emergency department, if they had just talked to the mother, the right person in the family hierarchy, he wouldn’t even have been coded and brought to the unit. They would have just let him go peacefully, naturally, and wouldn’t have put them (family) through the trauma...”*

Cognitive knowledge learned during international experiences plays an important role in understanding family dynamics and health care practices when caring for Hispanic patients and their families in the United States (US) healthcare system.

### **Practical theme.**

*Practical learning resulted in improved communication skills.* Two subthemes emerged from the interviews: Spanish skills and working with interpreters. Improved communication skills focused on learning and improving Spanish skills. Most students who took part in the international trips had taken several high-school or college Spanish courses. They indicated that being immersed in the culture where they were required to communicate in Spanish provided confidence that they had not attained during previous Spanish classes. Graduates expressed that working with the indigenous populations of Guatemala and Ecuador allowed them to practice their medical terminology, interview techniques, and patient teaching in Spanish. These previous experiences now allow them to communicate with patients about pain issues, patient teaching topics, and through alternative forms of communication such as touch, a smile, or simple sign language with gestures. One graduate expressed this:

*“I mean I’ve had Spanish classes before; but by the third day of being in Ecuador all of a sudden I could really communicate with these people using my chopped up Spanish, but I was able to actually communicate with them through the little bit of Spanish I knew...”*

In their current practice, having knowledge of Spanish helped with patients with limited English who were attempting to communicate in English.

*“Knowing kind of how they form sentences in Spanish, and understanding that and the pronunciation a little bit has helped me even a little in*

*understanding the English that some of my Hispanic patients have tried to speak to me.”*

Graduates spoke of the value of learning to work with translators. Many graduates currently work in hospitals where they must rely on their own communication skills with non-English-speaking patients until a translator arrives on the unit.

**Affective theme.**

*Affective learning resulted in increased awareness, appreciation, and recognition.*

Three subthemes emerged:

***Awareness (Opened my eyes).***

In 8 out of 14 interviews, graduates used the phrase “opened my eyes” or some minor variation of the phrase. They expressed being more open and flexible to accepting people for who they are. Awareness also meant being aware of how people communicate needs differently. Graduates were now aware that each culture expects something (different) from their healthcare. One graduate expressed it in this manner:

*“Before going on the trip, you just have the feeling of your way is the right way because you’ve been doing it for so long, but (now) you’re able to understand why other people have the attitude that they do. This made me a more open-minded person.”*

Another comment expanded on this subtheme of being open.

*“I’m just more open to asking them. “Do you prefer me to do it this way or do you want me to do it that way?” You could do everything your way*

*and totally make someone completely uncomfortable or just straight up  
and ask them what they like and how they prefer to get it done.”*

***Understanding leads to appreciation.***

Graduates indicated a change in their attitudes and an appreciation for Hispanic culture. One graduate commented, “I get excited when I have an Hispanic family.” Many expressed respect and were interested to learn more about the culture. They had begun the process of seeing the patient in a different light. One person expressed it as “to fit their needs versus making them fit your mold.” They were more aware of spiritual, cultural, and food preferences. Valuing culture has the potential to lead to a trusting relationship as the following graduate explains:

*“....culture is kind of like their whole life. And so if you treat them like  
that doesn’t matter and like you don’t care about it, and you don’t care  
about learning about it, then why are they going to think you care about  
them and that you want to help take care of them? Then why should they  
trust you?”*

***Recognition (Privilege).***

Graduates recognized privilege from new perspectives. They saw the privileges that they experienced as Americans, yet they also saw how the recipients of healthcare in Guatemala and Ecuador recognized healthcare itself as a “privilege.”

*“It’s a totally different perspective on how you view... to us, it’s a hassle  
to go to a doctor and to them it’s a privilege.”*

Several students spoke of feeling as if they had been living in a box or a bubble in the United States before going to Ecuador or Guatemala.

*“Before I went over there, I think I lived in a box, and I didn’t realize what else was out there. So it really was an eye-opener for me. And, you know, you come back to America and you’re, like, boy, we are so selfish, we are so blessed and we have everything... They are so grateful and thankful for what little things we offer them while we were there.”*

Additional themes emerged which do not neatly fit into the categories of cognitive, practical, or affective.

### **Seeing makes it real.**

Graduates repeatedly emphasized the value of “seeing” aspects of a different culture. Seeing the people, the environment, the poverty, the religious practices, the diet, and the lack of healthcare resources made a huge impact. Prior to each trip, all participants had engaged in lectures, reading assignments, and conversations about the country and regions where they would be traveling. They had heard about the poverty and been prepared for the type of living conditions that they would encounter, but seeing for themselves made it real.

*“We learn it in textbooks, but to actually see it in practice is different.”*

Another graduate expressed a change in attitude on social issues being faced in the US as a result of going there.

*“I think overall in America there is ...not across the board, but for the most part I would say a lot of people who are frustrated. I think it comes*

*by the influx of the Hispanic population. But I think going there kind of gives you a new perspective and appreciation...”*

Although graduates commonly used the word “seeing,” their use of “seeing” did not seem to imply that only observation was important. Interaction with people was an important part of “seeing.”

*“It was beneficial for me to actually go and physically see and be able to talk to people about their specific beliefs on healthcare and to be able to see and witness the gender roles and the families and the communities. It was immensely more helpful than just learning in class, to actually be able to go and see that.”*

### **Culturally congruent care.**

Graduates provided numerous examples of providing cultural congruent care in their current nursing practice. They were able to communicate with Hispanic patients in the patient’s native language. Of course, the degree of communication was dependent on the graduate’s experience and knowledge of the Spanish language. Overall, graduates felt that their confidence and proficiency with Spanish had improved as a result of the international experience.

Graduates were able to recognize different responses to pain with Hispanic patients. They recalled how stoic the people of Guatemala and Ecuador had been in their tolerance of pain during clinics in remote villages. Now, the graduates observed similar stoic responses to pain. Some graduates described having to encourage Hispanic clients to ask for and accept pain medication after surgery.

Patient teaching techniques are adapted based on communication patterns. Graduates recognize that silence does not equate to agreement. During the patient teaching process, Hispanic women commonly do not ask questions and only nod “yes” to instructions. Greater value is placed on the need to follow-up instructions with questions to clarify knowledge and to ask for return demonstrations. Translators are used to provide in-depth instructions if the patient or family has limited English skills. The 3 modes of culturally-based action and decision-making (Leininger & McFarland, 2006) are utilized during practice. Preservation allows natural herbs and teas to be included in the plan of care. Accommodation allows nurses to adapt hospital routines to fit with specific cultural values. Restructuring healthcare practices through education allows nurses to facilitate changes in family care for better health outcomes. One graduate recalled an experience which demonstrates a changed perspective on the need to provide culturally congruent care.

*“Actually, when I first started my job, we have a long list of admission questions, and one of the things is cultural and spiritual and ethnic requests...it was not too long after we’d gotten back from Ecuador. I remember thinking, these people really might have something to fill this place. This isn’t just a question just to be nice. These people really might have specific food requests or prayer rituals, or whatever they would like for us to recognize.”*

### **Commitment to international service (Stepping stone).**

Overwhelmingly, graduates expressed desire to participate in international service in the future. All participants indicated that they planned to take part in another international medical mission at some point in their life. One graduate explained it in these terms:

*“It really just served as a stepping stone. I don’t think if I had not gone in nursing school, I don’t know if I would have gone after college or not. I don’t know if I would have made time into my schedule after starting work or not. But now, I make time because I know what an incredible opportunity it is to serve...”*

Of the 14 graduates interviewed, 3 had already participated in trips to Peru and Honduras since graduation. Two more graduates had applied for trips to be taken in the next year. The remaining graduates commented that work, financial, and family obligations prevented them from taking part in international missions at the present. Several of the graduates had already returned to school to pursue further degrees, but planned to participate in trips following graduation.

### **Discussion**

The findings from this study suggest that service-learning is an effective strategy for teaching cultural competence. Several of the themes and subthemes are consistent with the benefits of service-learning. In addition, the findings from this study are consistent with previous studies on international or immersion experiences with nursing graduates. *Seeing makes it real* is consistent with the experiential nature of service-



learning (Nokes et al., 2005). Participants felt that experiential learning in communities was more beneficial than classroom experience (Evanson & Zust, 2006; Haloburdo & Thompson, 1998; St Clair & McKenry, 1999). Experiential learning also involved improved communication skills (Ryan et al., 2000) by learning a second language (Kollar & Ailing, 2002) and using alternative forms of communication (Haloburdo & Thompson, 1998).

Service-learning promotes social growth (Duckenfield & Swanson, 1992). The affective subthemes of *awareness (opened my eyes)*, *understanding leads to appreciation*, and *recognition (privilege)* support this increase of social skills. Graduates' awareness of poverty and the lack of resources in these lesser-developed countries were heightened by the international experience (Grusky, 2000; Walsh & DeJoseph, 2003). Witnessing the poverty made graduates feel blessed with so much in the US (Evanson & Zust, 2006). They developed an increased awareness of cultural values (Evanson & Zust, 2006; Kollar & Ailing, 2002). Graduates experienced self-confidence in communication skills (Haloburdo & Thompson, 1998). Being open to interactions with diverse cultures (Evanson & Zust, 2006; Kollar & Ailing, 2002) and understanding differences in cultural groups help nurses to relate to others in an increasingly global society.

*Culturally congruent care* is an outcome of international education experiences (Ryan et al., 2000). In order for graduates to provide culturally congruent care, they must be provided with opportunities which promote cognitive, practical, and affective learning dimensions. The findings from this study indicate that graduates did benefit from learning in all 3 dimensions. Following graduation, they were able to take those learning

experiences and apply them to clinical practice to provide culturally congruent care. All graduates indicated they felt a desire to continue with international service during their career. This construct of desire is consistent with the Process of Cultural Competence as developed by Campinha-Bacote (2003). The Jeffreys' CCC Model does not address desire explicitly since desire is consistent with motivation. Motivation is an influencing factor of self-efficacy. The CCC Model is based on the concept that as self-efficacy increases, the nurse is more likely to engage in culturally congruent care.

Cultural encounter is also a construct associated with the Process of Cultural Competence (Campinha-Bacote, 2003). Clearly, the experiential learning during the international experience provided opportunities for cultural encounters. Based on the findings, all 3 learning dimensions were directly influenced by encounters. Cultural encounters play a major role in moving along the continuum toward cultural competence (Campinha-Bacote, 2003).

### **Limitations**

Having a pre-established framework for the learning dimensions of cultural competence may be viewed by some as a limitation of this qualitative study. The Jeffreys' CCC Model has previously been applied and evaluated based on quantitative measures with the Transcultural Self-Efficacy Tool (Jeffreys, 2000). Qualitative studies may be used to strengthen content validity of a scale (Lo-Biondo-Wood & Haber, 2002). At this time, this study represents one of the first studies to use a qualitative method to assess the learning dimensions of cultural competence. While the researcher did categorize themes based on the learning dimensions of cultural competence, the

researcher remained open to potential disconfirming data. As noted in the Results section, two themes did emerge which could not be clearly categorized under the 3 learning dimensions of the CCC Model.

While the literature indicates that telephone interviews are just as effective as face-to-face interviews, the limited time for interviews (20-30 minutes) as suggested by the literature did have an impact on the ability of the researcher to explore in-depth certain data points which did not emerge in all interviews. For example, only two participants spoke of specific health disparities they were aware of in the US healthcare system. While Creswell (1998) suggests that 3-5 cases are sufficient for a collective case study, this researcher completed as many interviews as possible in an attempt to confirm information. The researcher did note that in the interviews that continued past the 30-minute interval, participants tended to give shorter, less detailed answers. This may have influenced the depth of information provided for the last questions.

Implicit in the nature of qualitative research interviewees provide self-reported information. Participants may give information which they deem to be correct, rather than a true reflection of their personal thoughts or actions. Using multiple cases to identify qualitative themes provides compelling evidence to support the findings of the study. Yin (2003) considers the use of multiple cases to be comparable to using multiple experiments.

### **Implications for Nursing Education**

International or immersion experiences for nursing students can benefit from a service-learning framework to organize the learning experience. Students should be

prepared with knowledge about the social and political influences of the country, the environment, the native language, and current state of health prior to the trip. While in-country, students should be provided opportunities to work directly with the indigenous people. Exposure to as many variables of daily life as possible will provide the experiential learning to influence the learning dimensions of cultural competence. Classroom or textbook learning will only provide limited knowledge and self-efficacy. Encounters or interactions are crucial to increasing transcultural self-efficacy.

### **Conclusion**

International service-learning provides opportunities for cultural encounters which influence the learning dimensions of cultural competence. These cultural encounters allow practice in applying transcultural knowledge with actual people in a real-life context. Students may learn numerous details about diverse ethnic groups in the classroom, but transcultural self-efficacy will only be truly increased when the student has a chance to practice these skills. Nursing has a long history of using experiential learning and has taken didactic learning from the classroom and applied it to the bedside. Learning strategies for cultural competence are no different. Nursing students must take their knowledge of transcultural nursing to the bedside or the community and apply it through direct patient care. It is hard to become aware of differences when the person the nurse is caring for looks just like the nurse. To be most effective, the family or community needs to be different from the student. International service-learning provides a window to a new world with new people, different perspectives, and unique health practices.

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## **APPENDIX**

### **Research Questions**

1. How did your experience in Guatemala or Ecuador influence your cognitive learning of cultural competence? Describe at least one incident in which that cognitive learning has impacted your current nursing practice.
2. How did your experience in Guatemala or Ecuador influence your practical learning of cultural competence? Describe at least one incident in which your practical learning from Guatemala or Ecuador has been applied to your current nursing practice.
3. How did your experience in Guatemala or Ecuador influence your affective learning of cultural competence? Describe at least one incident in which that affective learning has influenced your current nursing practice.
4. How did your international experience influence your desire to participate in service in your local community or another international community? Why or why not? What types of service activities have you been involved in since graduation? What were your duties and/or roles? Describe the community which you served and why you chose to work with this specific community.
5. Describe how cultural competence is important to your current job responsibilities as a registered nurse. Have you provided presentations, received any awards, recognition, or additional training related to cultural competence since graduation?

## **CHAPTER FIVE**

### **DISCUSSION**

The 3 sequential studies document the progressive evaluation of transcultural self-efficacy (TSE) following international service-learning with baccalaureate nursing students. According to Jeffreys (2006), cultural competence requires transcultural skills in 3 learning dimensions: cognitive, practice, and affective. These learning dimensions are directly influenced by self-efficacy and lead to the achievement of culturally congruent care.

The 2007 study demonstrated a statistically significant increase from pre-test to post-test scores as measured by the Transcultural Self-Efficacy Tool (TSET) with 60 senior-level baccalaureate nursing students. A paired-samples *t* test was used to analyze total scores and each subscale score (cognitive, practical, and affective). The significant increase was noted across all scores. Multivariate analysis attempted to evaluate the effect of clinical sections on pre-test and post-test scores. A significant effect was only found in the cognitive scores using a one-way MANOVA. The follow-up ANOVAs demonstrated no significant effect. The researcher's initial hypothesis anticipated that the international group would demonstrate higher self-perceptions in TSE than students who did not participate in an international experience. Findings from this study could not confirm this hypothesis. Sample size directly influenced the ability to confirm the effect of clinical section on TSET scores. Clinical sections ranged from 6-11 students per group. While the overall total of 60 students enrolled in the community health course

was sufficient for statistical analysis, the limited size of the clinical sections was not adequate for statistical comparison.

It is relevant to note that on the pre-test mean scores, the international group scored the lowest, yet following the trip to Guatemala the international group scored the highest on mean post-test scores. These results may be consistent with the findings of Alpers and Zoucha (1996) where students who had no previous content in cultural care actually self-rated themselves higher in cultural confidence and ability to provide culturally congruent care. Alpers and Zoucha report that the scores may indicate a lack of cultural knowledge and reflect an “arrogant ignorance” (p.12) of cultural issues. This researcher believes that the lower scores of the international group at the beginning of the course may actually be a result of more realistic views of TSE. Alternatively, the international group may have recognized their own inadequacies in cultural knowledge and skill; therefore they volunteered to take part in an international project.

The 2008 study replicated the quantitative component of the earlier study, but added a reflective component in an attempt to capture data that could not be quantified through a survey. In a sequential explanatory design, qualitative data is used to augment quantitative data (Hanson et al., 2005). Quantitative data from this study again used a paired samples *t* test to analyze total scores and subscale scores. The paired-samples *t* test was calculated to compare the mean pre-test total score to the mean post-test total score. The mean of the pre-test was 562.62 (*sd* = 90.52) and the mean on the post-test was 681.11 (*sd* = 78.25). A significant increase from pre-test to post-test was found ( $t(44) = -8.512, p < .001$ ). The same paired-samples *t* test was used to analyze each

subscale score: cognitive, practical, and affective. For each subscale the pre-test mean score was compared to the post-test mean score. A significant increase was demonstrated in each subscale: cognitive [pre-test = 6.55 (*sd* = 1.20), post-test = 7.99 (*sd* = 1.06), ( $t(44) = -6.852$ ,  $p < .001$ ], practical [pre-test = 6.01 (*sd* = 1.71), post-test = 7.92 (*sd* = 1.10), ( $t(44) = -8.05$ ,  $p < .001$ ], and affective [pre-test = 7.69 (*sd* = 1.04), post-test = 8.64(*sd* = .95), ( $t(44) = -6.29$ ,  $p < .001$ ]. Multivariate analysis attempted to evaluate the effect of clinical section on scores. A one-way MANOVA was calculated examining the effect of clinical section on each subscale pre- and post-score. No significant effect was found with the cognitive, practical, or affective scores ( $\text{Lambda}(14,72) = .695$ ,  $p > .05$ ), ( $\text{Lambda}(14,72) = .771$ ,  $p > .05$ ), ( $\text{Lambda}(14,72) = .622$ ,  $p > .05$ ). No significant effect was found with total scores as well ( $\text{Lambda}(14,72) = .588$ ,  $p > .05$ ). Limited sizes of clinical sections remained a problem for quantitative comparative analysis.

The qualitative findings did indicate that students improved in all 3 dimensions with the international clinical section making the most significant gains. The international section revealed 1 cognitive theme, 2 practical themes, and 3 affective themes compared to the local clinical section which revealed 1 cognitive theme, 1 practical theme, and 2 affective themes. In studies by Jeffreys (2000), students were least confident in knowledge, more confident in interviewing, and the most confident in attitudes. The cross-case analysis between the sections revealed similar themes, yet the international section was able to provide more specific details to their learning experiences in their reflection notes. Students who engage in international experiences are more likely to engage in discussions with greater depth of cultural sensitivity and

understanding for diverse cultural groups than students who do not travel outside the US (St Clair & McKenry, 1999).

One of the limitations of the 2008 study concerned the use of reflection notes in lieu of personal interviews. While reflection notes have been used by other researchers to evaluate outcomes of international experiences (Evanson & Zust, 2006; Ryan et al., 2000; St Clair & McKenry, 1999), their use did not facilitate verification through member checking (Creswell, 1998) in this study. Students who had taken part in the 2008 trip graduated with many of them moving out of the area before the qualitative data could be completely analyzed. Recognizing this need for verification, the researcher planned to incorporate this procedure into future studies.

While the two previous studies did indicate that students gained TSE in all 3 learning dimensions during the community health course, questions remained about the long-term influence of the service-learning experiences. Of particular interest, the researcher considered what the influence of international service-learning might be on clinical practice beyond the role of student nurse. This interest led to the final 2009 study related to the influence of international service-learning on TSE in baccalaureate nursing graduates and their subsequent clinical practice. Several researchers have conducted studies to evaluate the effects of international or immersion programs with nursing students (Bentley & Ellison, 2007; Haloburdo & Thompson, 1998; St Clair & McKenry, 1999; Walsh & DeJoseph, 2003; Zorn et al., 1995), but few have studied the long-term effects of international or immersion programs (Evanson & Zust, 2006; Kollar & Ailinger, 2002; Ryan et al., 2000). The 2009 study focused on the knowledge students

gained in the learning dimensions of cultural competence and how that knowledge eventually influenced their ability to provide culturally congruent care in their role as a registered nurse.

Qualitative themes derived from the 2009 study indicated that nursing graduates had gained knowledge in cognitive, practical, and affective dimensions during their international service-learning experiences. These themes are consistent with the quantitative results of the TSET in earlier studies. As students gained knowledge, TSE increased as evidenced by increased scores on the TSET. Service-learning allows students to develop a greater sense of personal efficacy (Eyler, 2002). Service-learning promoted social growth as evidenced by the affective themes of *Awareness*, *Understanding leads to appreciation*, and *Recognition*. These themes are supported by the work of previous researchers (Evanson & Züst, 2006; Haloburdo & Thompson, 1998; Kollar & Ailinger, 2002; Walsh & DeJoseph, 2003).

Other themes emerged which have relevance for teaching cultural competence. One theme focused on the value of experiential learning that occurs in service-learning projects when students engage in direct service to communities (Johnson & Notah, 1999). *Seeing makes it real* as a theme emphasizes that students perceive experiential learning as superior to classroom learning when it comes to learning cultural knowledge and skills (Evanson & Züst, 2006; Haloburdo & Thompson, 1998; St Clair & McKenry, 1999). The opportunities afforded by international service-learning allow students to move outside their normal lives and view a community through a different lens. According to Walsh and DeJoseph (2003), students live in a “cocoon of inclusion” (p. 271) even when

they work in a diverse community, but in order to understand the experiences of a different community they must leave behind their daily lives and professional relationships and enter a new culture. This theme is also consistent with “cultural encounters” (Campinha-Bacote, 2003). Cultural encounters involve face-to-face interaction with people from diverse cultures. Situated cognition explains how cognition and knowledge are tied to context and culture in which it is taught (Kim & Hannafin, 2008). Cultural encounters have the potential to enhance situated knowledge as nursing students work and live within the culture of a community. As students learn concepts in particular situations (classrooms), they develop conceptual case knowledge; yet they also require strategic knowledge in order to use this knowledge in the future (Kim & Hannafin, 2008). Strategic knowledge requires reflection and collaboration within communities; both are components of service-learning. As the graduate nurse applies strategic knowledge in working with clients from diverse backgrounds, the graduate nurse is more likely to engage in the provision of culturally congruent care. Data obtained from the interviews provided clear examples of how graduate nurses were currently providing culturally congruent care with the clients they were working with in hospitals and other healthcare settings.

*Commitment to international service (Stepping stone)* demonstrates that the service-learning experiences in Guatemala and Ecuador did positively influence the intent to engage in future international work with diverse communities. Self-efficacy is influenced by actual performances, vicarious experiences, forms of persuasion, and emotional arousal (Jeffreys, 2006). When students have positive experiences, self-

efficacy is increased; thereby increasing motivation to engage in future activities.

According to Campinha-Bacote (2003), this motivation would be termed “desire,” which is the “key and pivotal construct of cultural competence” (p.14). Findings from this study suggest that encounters may be equally, if not more influential in the process of cultural competence.

Many students may be unconsciously unaware of cultural differences. Awareness may not occur until a person encounters someone who is different. According to Helms’ White Racial Identity Development Model (as cited in Sue and Sue, 2008), in the *contact* status a person is oblivious to their own biases and prejudice. The person may consider himself or herself as color-blind. Progression of status from *contact* to *disintegration*, *reintegration*, and *pseudoindependence* may be propelled based on an encounter which forces the person to be aware of injustice in racial minorities. Eventually, the intent is for the person to move along to *immersion* and *autonomy* status, where the person is knowledgeable about race and cultural differences and no longer feels intimidated by the diversity. This model has particular relevance since the majority of nurses are white females. Participation in service-learning increases knowledge of different races and cultures (Astin & Sax, 1998) and has an effect of reducing stereotypes (Eyler, Giles, Stenson, & Gray, 2001). The outcome of the encounter will directly influence confidence (desire) to engage in further activities. The structured, field-based pedagogy of service-learning increases the potential for a positive experience.

The major limitation of the third study was the limited duration of the individual interviews. Guidelines established in the literature (Creswell, 1998; Kobak, Williams,



Jeglic, Salvucci, & Sharp, 2008; Novick, 2008; Opdenakker, 2006) were followed. The researcher sensed frustration in the voices of participants when interviews threatened to extend longer than 30 minutes. As the researcher began the last question during each interview, the majority of participants tended to give shorter, less detailed answers. This seemed to signal that participants were ready to end the conversation. Interviews were conducted based on a time that participants had self-selected and identified as convenient times to engage in conversation. Had time allowed some random ideas might have been explored in more detail. Telephone interviews were chosen as the interview format of choice since participants lived in several different states. Plus, nurses tend to work alternating shifts with alternating days off. These types of schedules would have made face-to-face interviews considerably harder to coordinate between the researcher and the participants. In future studies, less participants with longer interview times may be considered.

Future studies might consider using a control group to compare between students who take part in service-learning versus others who do not participate in service-learning during community health courses. An increasing number of schools of nursing are having students take part in international experiences. A multi-site research study would be beneficial to support this type of investigation. Funding is an issue that needs to be addressed. Students who took part in these international trips received monetary help from friends and family and a small monetary incentive from a faculty grant. Many other students would consider taking part in the international travel if funding were available to cover all costs. A question exists that outcomes might be different if all students had the

opportunity to practice in another country. At this time, only students who have the financial means have the opportunity.

Research conducted over a 3-year period indicates that international service-learning had a positive influence on TSE. Both quantitative and qualitative results demonstrated that students increased TSE in cognitive, practical, and affective learning dimensions. Service-learning provided opportunities for cultural encounters which made knowledge and understanding “real.” In addition, service-learning in Guatemala and Ecuador influenced the desire to engage in future international work.

## **CONCLUSION**

Most studies have focused on immediate outcomes of teaching cultural knowledge in the classroom or international/immersion experiences in countries outside the US. Only a few studies have focused on long-term effects of international/immersion experiences. This study represents one of the first studies in nursing to evaluate cultural competence both on a short-term and long-term basis. Additionally, this research represents the first known study to use a qualitative method to assess the learning dimensions of cultural competence.

The research presented here demonstrates increased TSE both through quantitative and qualitative methods. These studies have triangulated the quantitative data with qualitative data which support the learning dimensions of cultural competency. Data sources included a survey, public documents, field notes, reflective journals, student artifacts, and interviews. The findings suggest that nursing students gained TSE which later allowed them to practice culturally congruent care as registered nurses.

International service-learning is an effective pedagogy for teaching cultural competence. It provides opportunities for students to move outside the “bubble” that surrounds their normal lives while working and living in a new culture. The experiential learning facilitates personal, social, and professional growth through cognitive, practical, and affective learning dimensions. It provides a stepping stone to a future of service and commitment to others of diverse cultures. Not every student can take part in an international program, but educators can plan service-learning experiences for students to work in diverse ethnic and racial communities. All too often, projects are planned to

work with communities where students or faculty are similar to the members of the community. While the service is valuable, it may never afford students the chance to see a distinctly different set of values, beliefs, or practices. Seeing and experiencing differences up-close and personal has the potential to open one's eyes and one's heart!

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